MORTALITY TRENDS IN MATARIA DISTRICT

T H E S I S

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I dedicate this Thesis to my Family .

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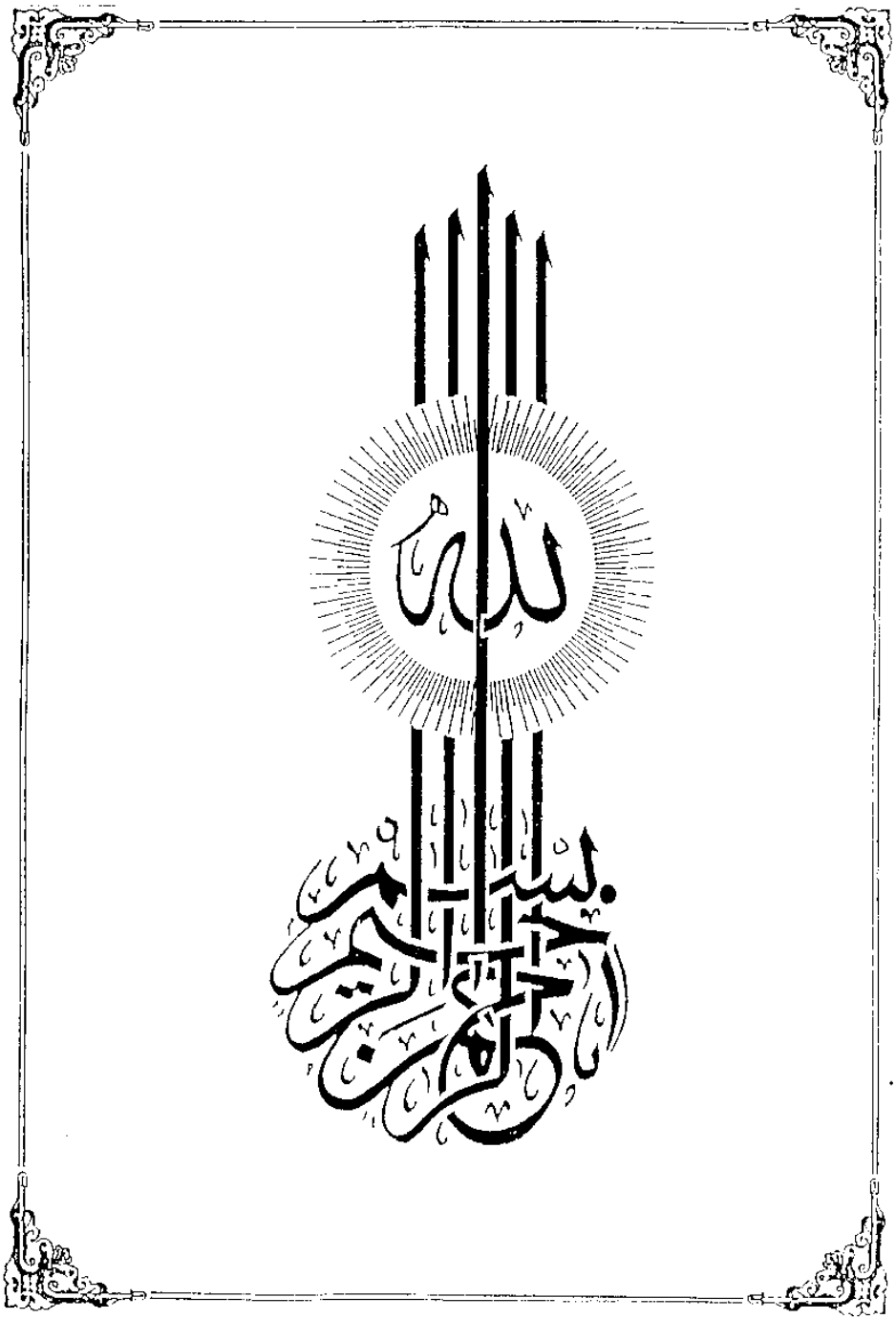

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C O N T E N T S

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MORTALITY TRENDS IN MATARIA DISTRICT

INTRODUCTION

The mortality statistics form one of the essential ılth and socioeconomic indices which are valuable for measu- ıent of community development and planning of health programs.

Thus the mortality statistics remain the most practical lex of variation in the level of health of population .

To the epidemiologist, the most important event and : least equivocal measure of health is death, which could be .led the absolute opposite of health .

Medical certification of the cause of death is univer- . which provide a basis for mortality statistics. In addition the cause of death, other facts as place of death, sex, race, .igion, marital status, birth date, usual occupation, birth ıce, service in armed forces should be taken in consideration.

Death rates are computed and published for all causes ! ages in many combinations of place, race, age and sex groups.

Obviously, there are variations in the accuracy of ːse facts and in some cases in their interpretation. Sex and ː are recorded with close to 100% accuracy but race, marital ıtus and occupation are not .

The greatest is accuracy arises in certification of he cause of death, a fact respectedly confirmed in many studies.

There are several other problems in death certifi- ation one concerns which disease is to be underlying, another roblem is the lack of knowledge by many physicians about the mportance of international classification of death (I.C.D.)- Maxy 1980).

* * *

REVIEW OF LITERATURE

ITAL STATISTICS

John Snow & Lemuel (1982) reported that geographic atterns discerned from vital statistics have contributed to he Solution to public health problems. Mortality data are a nique source of readily available health status indicators or small geographic area over a very long period of time with easonable comparability .

The vital statistics System provides documentation f major changes in mortality over the decade . Overall morta- ity has declined substantially providing unequivocal evidence hat the nation's health has been improved .

Although the vital statistics system provides strong vidence that such declines are real. This situation has impeded ur understanding of how changes in diet, smoking, exercice, ypertension control and medical care have contributed to the ecline .

The greatest potential for geographic analysis of ortality lies in the examination of time space interactions .

This type of analysis is especially useful in iden-
ifying emerging trends in disease risks. In sum despite
heir limitations, Causes of death statistics are a rich source
f information for clinical, epidemiologic and health policy
urpose .

ORBIDITY

Health indices are mortality, morbidity and disa-
ility rates. Morbidity is basically a departure from a state
f physical or mental wellbeing, resulting from injury or
isease, of which the affected individual is aware . Morbidity
ncludes not only active or progressive disease but also im-
airments that is, chronic a permanent defects that are static
n nature, resulting from disease, injury or congenital malfor-
ation (Kark, 1974) .

Hobson (1975) reported that morbidity data are
eeded for the planning, development, and management of pro-
rams concerned with all aspects of social security in its
idest sense . The use of morbidity statistics are, the con-
rol of infections diseases, planning for development of
reventive services, planning for adequate treatment services
nd national study of distribution of diseases and impairments.

Morbidity statistics must take account of several actors which do not affect mortality statistics, in that as istinct from death, illness may occur many times in the same erson, have a duration ranging from hours to years, vary in everity from the most trivial to the most serious and lead o varying degree of disturbance to the patient's ordinary ode of life from minimum disability to lengthy hospitaliza- ion (Hobson, 1975) .

Taylor and Knoweldon (1964) mentioned that morbi- ity can be measured by incidence rate and prevalence rate .

. INCIDENCE RATE

This rate measures the frequency of occurance of ew illness in a population

$$\text{Incidence rate} = \frac{\text{Total number of new cases of certain disease}}{\text{Total number of population}} \times 1000$$

t's used in acute diseases of short duration .

. PREVALENCE RATE

This rate measures the frequency of illness (new nd old) in a group of population at a definit period of time.

$$\text{revalence rate} = \frac{\text{Total number of cases of certain diseases (old + new) at a certain point of time}}{\text{Total number of population at that point of time}} \times 1000$$

It's used in chronic diseases of more than one year duration (Taylor and Knoweldon 1964) .

THE MORTALITY RATES

Clark and Macmahon (1981): reported that in recent years there have been procedural changes in certification of death . The immediate and underlying causes of death are now identified as well as other significant contributary conditions. These addition data permit a more accurate assessment of the actual cause of death . The advantages of mortality rates as indicators of community health are their relative case of measurement and the availability of a long series of such data in many countries. The usefulness of mortality data depends on many e.g: accuracy of diagnosis, completness of reporting and uniformity of coding practices .

Mortality rates are frequently employed in the surveillence of disease . Mortality rates are employed in a study of disease etiology, they are most useful when the disease has a high fatality rate because most cases of the disease are likely to be included in the study .

Feldman (1981) reported that the probability of dying from a specific condition is measured by the mortality rate . The numerator indicates the count of deaths during a specified

me interval, and the denominator indicates the average popu-
ation at risk . The advantages of mortality rates as indica-
ors of community health are their ease of measurement and the
vailability of a long series of such data in many countries,
he usefulness of mortality data depends on many factors e.g.
ccuracy of diagnosis and completeness of reporting .

Mortality statistics remain where they are available
he most practical index of variation in the level of health
f population (Nelson 1975) .

Sales (1983) : reported that a reduction of morta-
ity is as important for countries to achieve a balanced rate
f population growth as its the reduction in birth rates .
he main function of this meeting is to recommend ways in which
ortality levels can be effectively lowered .

He also adds that the experience gained by countries
n delivering family planning programs through motivation and
ervice delivery could be translated with due adaptations to
educe mortality .

The mortality panorama in low developed countries is characterized above all by exceptionally high mortality in certain strata. These strata include nations identified as " the poorest of the poor ", classes having very little education and poorly-paying jobs, and children below ages 5. When mortality is high among these groups, it's almost always a result of excessive death rates from infectious and parasitic diseases that available health technology is able to prevent and/or cure . In this sense the continuing high mortality of these groups is particularly grim social fact .

INTERACTIONS BETWEEN HEALTH, MORTALITY AND DEVELOPMENT

Draft 1983 : reports that the goal of development is to advance the walfare and well-being of populations .Improvec levels of health and longevity are probably the single most highly-valued component. All peoples and all governments are striving to advance levels of health .

" Development " in its broadest sense means a development of the populations capacity to meet its goals, among these goals improved health is paramount. Indeed the guarantee that death will not come capriciously before old age is probably the single greatest boon that can be conferred on mankind . The extent of achievment of this guarantee is a unique and central measure of develcpment .

The large mortality of information about health conditions and their correlates in low developed countries pertain exclusively to children . Data Systems for measuring and analysing adult mortality conditions are far less adequate .

Although the data bases are far better in more developed countries the source of mortality changes there often remains mysterious . This is so with regard to sudden decline in cardiovascular diseases that began in many countries .

Mortality Statistics

Mortality indices are influenced by many factors e.g: Age, Sex, Birth Place, Residence, etc... . Procedures for measurement of mortality should deviate the influence of these factors as well as the distinction the contribution of different causes of death .

It's compulsatory by law in Egypt to register deaths within the first 24 hours of death .

The informations which are required to be registered in brief are :

1. Name of deceased
2. Age
3. Sex
4. Residence